

**Notice of Allowability**

Application No.

09/707,926

Examiner

Susanna M. Diaz

Applicant(s)

BUTTON ET AL.

Art Unit

3623

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Examiner's Amendment agreed to on January 20, 2006.
2. ☒ The allowed claim(s) is/are 9-11, 13, 14, 21, 22 and 24-33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Susanna M. Diaz*  
**SUSANNA M. DIAZ**  
**PRIMARY EXAMINER**

*AU 3623*

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas Zell (Reg. No. 37,481) on January 20, 2006.

The application has been amended as follows:

Please enter attached Examiner's Amendment.

### ***Reasons for Allowance***

2. Claims 9-11, 13, 14, 21, 22, and 24-33 are allowed.

3. The following is an examiner's statement of reasons for allowance:

Zingher discloses a print job allocation system in which a master printing schedule is assembled (by a central computer) based on the printing schedules from various printing plants. Customers submit their print jobs and these print jobs are allocated to printing plants with available capacity. Customers may override selections by the central computer. Also, predicted schedules and locations of the printing plants may be incorporated into the print job allocation decision process. Zingher does not teach that the various print shops effect the transfer of a print job independent of any centralized scheduling application, sending printing production schedules to the central

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computer with access controls, and creating the production schedule by capturing an image of a human readable rendering of the production schedule. While these features are individually old and well-known in the art of production planning and scheduling, there is no teaching or suggestion in the prior art to combine all of these features taught by Zingher in combination with the missing features into one integrated print job management process. This combination of features is recited in claims 9-11, 13, 14, 22, and 24-33; therefore, claims 9-11, 13, 14, 22, and 24-33 are deemed to be allowable over the prior art of record.

Also, Zingher does not teach that the various print shops effect the transfer of a print job independent of any centralized scheduling application, sending printing production schedules to the central computer with access controls, and limiting the production schedules of the print shops in the second set of print shops retrieved by the print shop in the first set of print shops from the central repository as a function of (a) a user profile that is attached to the print shop in the first set of print shops and that defines a set of preferred print shops from the second set of print shops and (b) geographical location of the print shop in the first set of print shops and the print shops in the second set of print shops. While these features are individually old and well-known in the art of production planning and scheduling, there is no teaching or suggestion in the prior art to combine all of these features taught by Zingher in combination with the missing features into one integrated print job management process. This combination of features is recited in claim 21; therefore, claim 21 is deemed to be allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Tsunekawa et al. (JP 11-203082 A) -- Discloses a distributed printing system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 10 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Susanna M. Diaz  
Primary Examiner  
Art Unit 3623

January 20, 2006

# EXAMINER'S AMENDMENT

## Listing of Claims:

Claims 1-8 (Canceled).

9. **(Currently Amended)** A computer implemented method for processing a print job with geographically distributed print shops, comprising:

coupling a first set of print shops, a second set of print shops, and a central repository via a computer network; the first set of print shops having one print shop and the second set of print shops having a plurality of print shops;

sending to the central repository a production schedule representative of at least one print shop in the second set of print shops with access controls that allow visibility of its production schedule to include the print shop in the first set of print shops; each production schedule sent by a print shop to the central repository comprising data allowing a representation for graphically displaying the respective production schedule;

retrieving, at the print shop in the first set of print shops from the central repository via the computer network when the print shop in the first set of print shops lacks sufficient printing capacity for processing the print job, the production schedules of print shops in the second set of print shops having access controls that permit visibility of their production schedules to the print shop in the first set of print shops; and

transferring, from the print shop in the first set of print shops to at least one print shop in the second set of print shops via the computer network, at least part of the print job when spare printing capacity is indicated in at least one retrieved production schedule of the second set of print shops;

wherein the production schedule data is created suitable for storage in the central repository by capturing an image of a human readable rendering of the production schedule;

wherein the print shop in the first set of print shops and the at least one print shop in the second set of print shops effect the transfer of the at least part of the print job independent of any centralized scheduling application while each

print shop may operate a scheduling application of its choosing; and

wherein each production schedule projects a mapping between print jobs and print devices over a period of time.

10. (Previously Presented) The computer implemented method according to claim 9, wherein the print shop in the first set of print shops graphically displays the production schedules of the second set of print shops retrieved from the central repository.

11. (Previously Presented) The computer implemented method according to claim 10, wherein each of the print shops in the second set of print shops sends its respective production schedule to the central repository.

Claim 12. (Canceled)

13. (Previously Presented) The computer implemented method according to claim 10, wherein at least some of the production schedules of the print shops in the second set of print shops are created from a digitized photograph of a hard copy rendering of their production schedules.

14. (Previously Presented) The computer implemented method according to claim 9, further comprising limiting the production schedules of the print shops in the second set of print shops retrieved by the print shop in the first set of print shops from the central repository as a function of geographical location of the print shop in the first set of print shops and the print shops in the second set of print shops.

15. (Canceled).

16. (Canceled).

Claims 17-20. (Canceled).

21. **(Currently Amended)** ~~The computer implemented method according to claim 16, further comprising~~ A computer implemented method for processing a print job with geographically distributed print shops, comprising:

coupling a first set of print shops, a second set of print shops, and a

central repository via a computer network; the first set of print shops having one print shop and the second set of print shops having a plurality of print shops;

sending to the central repository a production schedule representative of at least one print shop in the second set of print shops with access controls that allow visibility of its production schedule to include the print shop in the first set of print shops; each production schedule sent by a print shop to the central repository comprising data allowing a representation for graphically displaying the respective production schedule;

retrieving, at the print shop in the first set of print shops from the central repository via the computer network when the print shop in the first set of print shops lacks sufficient printing capacity for processing the print job, the production schedules of print shops in the second set of print shops having access controls that permit visibility of their production schedules to the print shop in the first set of print shops;

limiting the production schedules of the print shops in the second set of print shops retrieved by the print shop in the first set of print shops from the central repository as a function of (a) a user profile that is attached to the print shop in the first set of print shops and that defines a set of preferred print shops from the second set of print shops and (b) geographical location of the print shop in the first set of print shops and the print shops in the second set of print shops; and

transferring, from the print shop in the first set of print shops to at least one print shop in the second set of print shops via the computer network, at least part of the print job when spare printing capacity is indicated in at least one retrieved production schedule of the second set of print shops;

wherein the print shop in the first set of print shops and the at least one print shop in the second set of print shops effect the transfer of the at least part of the print job independent of any centralized scheduling application while each print shop may operate a scheduling application of its choosing;



wherein each production schedule projects a mapping between print jobs and print devices over a period of time.

22. (Previously Presented) The computer implemented method according to claim 9, further comprising creating production schedule data suitable for a storage in the central repository with a computer-aided scheduling tool.

23. **(Canceled).**

24 **(Currently Amended)** The computer implemented method according to claim 9 [[23]], wherein the image of the human readable rendering of the production schedule is captured using a scanner or camera.

25. (Previously Presented) The computer implemented method according to claim 9, wherein the production schedule is delivered from the central repository to the first print shop only in cases that the first print shop satisfies access conditions which are defined by the plurality of print shops.

26. (Previously Presented) The computer implemented method according to claim 9, wherein said retrieving, at the print shop in the first set of print shops from the central repository via the computer network when the print shop in the first set of print shops lacks sufficient printing capacity for processing the print job, filters the retrieved production schedules of print shops in the second set of print shops.

27. (Previously Presented) The computer implemented method according to claim 26, wherein the first set of print shops only displays production schedules of the second set of print shops which are located within a pre-defined geographical region.

28. (Previously Presented) The computer implemented method according to claim 26, wherein the first set of print shops only displays production schedules of the second set of print shops which belong to a pre-defined group of preferred print shops.

29. (Previously Presented) The computer implemented method according to claim 9, wherein said sending sends to the central repository a production

schedule representative of different levels of detail of at least one print shop in the second set of print shops with access controls that allow visibility of at least one of the different levels of detail of its production schedule to include the print shop in the first set of print shops.

30. (Previously Presented) The computer implemented method according to claim 29, wherein one level of detail of the production schedule includes details of customer deadlines for print jobs.

31. (Previously Presented) The computer implemented method according to claim 29, wherein one level of detail is a thumbnail representation of the production schedule.

32. (Previously Presented) The computer implemented method according to claim 9, wherein the period of time each production schedule projects a mapping between print jobs and print devices is a plurality of days.

33. (Previously Presented) The computer implemented method according to claim 9, further comprising recording an image of a human readable rendering of the production schedule before sending it to the central repository.